

respectfully submits that the IDS does properly refer to the parent application 09/385,443 in the header, the error in the text notwithstanding. Applicant further submits that the non-patent literature references not considered by the Examiner are cumulative of references which were properly considered pursuant to MPEP 609.I.A.2. Consequently, Applicant acknowledges the courtesies extended by the Examiner in acknowledging consideration of the IDS materials for the record.

Turning to the merits of the Office Action, claims 2-11 are pending in the present application. Claims 2-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lee et al.* (USP 5,563,421A) and Hejazi (USP 5,554,850A) and Bueno *et al.* (USP 5,594,253A). Applicant submits the following in traversal of the rejection.

Claim 2

The attenuation element of claim 2 describes attenuation of components so that aliasing noise due to components of the image information not lower than the Nyquist frequency becomes not stronger than 30% of intrinsic noise power at a frequency equal to half of the Nyquist frequency. To the extent that the Examiner's footnotes 1 and 2 in the detailed action would suggest that Applicant concurs that attenuation at this level is well known, or would suggest that a blur filter is an appropriate substitute to the attenuation device claimed, these points are not well-taken for all the reasons of record and for the reasons set forth below.

The Examiner cites scintillating plate 16 of Hejazi for teaching the claimed high frequency component attenuation means.¹

¹ To the extent the Examiner characterizes the recitation as an element under 35 U.S.C. Section 112, sixth paragraph in the Advisory Action of parent application 09/385,443, Applicant submits that Applicant neither acquiesces nor confirms that such provision is applicable.

However, the Examiner has yet to establish that the scintillating plate attenuates high frequency components of the electric charges bearing thereon high frequency components of the image information not lower than a Nyquist frequency, which is defined by the pitches of the two-dimensional image detecting elements, so that aliasing noise due to the high frequency components of the image information not lower than the Nyquist frequency *becomes not stronger than 30% of intrinsic noise power at a frequency equal to a half of the Nyquist frequency*. The Examiner continues to ignore this language of the claim. The Examiner's contention that this merely amounts to a "design choice" has seasonably been challenged and has gone un rebutted.

In particular, the Examiner has not indicated the attenuation level of Hejazi, and has not indicated how the attenuation level can be achieved in the physical tilt-rod structure of Hejazi. As previously submitted, the presence of tilted rods would suggest a wider spacing between pixels and limit the degree of freedom for noise control and signal level. These constraints heighten the possibility that the claimed feature can ever be met in Hejazi.

Furthermore, since the scintillating plate of Hejazi generates blur only at the angle at which the rods are inclined, the attenuation level of the high frequency components have anisotropy. Consequently, the attenuation level and the components that can be attenuated are limited.

In addition, photoconductor layer 8 of Lee does not generate electric charges upon exposure to visible light generated by the phosphor layer. At most, Lee discloses "flash exposure" of the photoconductive layer 8. See col. 5, lines 63 to col. 6, lines 46. However, the

“flash exposure” in Lee is applied to neutralize residual electrical charges before recording an image, and therefore does not contain image information nor it is used to record an image.

Also, in col. 6, line 8 of Lee, the “flash exposure” is done over a time interval of 1 to 30 seconds. On the other hand, light from a scintillating plate (such as that disclosed in Hejazi) is emitted over only a few milliseconds. Lee does not teach whether or not the detector of Lee is capable of recording such emissions emitted over only a few milliseconds.

Moreover, there is no reason to combine the scintillating plate of Hejazi with Lee since the purpose of Lee is to *remove* charges from an image capture panel whereas the purpose of Hejazi is to minimize aliasing when *obtaining* an X-ray image.

Furthermore, as it is described in col. 2, lines 13-14 of Hejazi, “the absorption of X-rays of the core in the scintillating fiber optics plates is close to 100%”. Therefore, an X-ray hardly passes throughout the scintillating plate of Hejazi. If the scintillating plate of Hejazi and the phosphor of Bueno were combined with Lee, the X-ray would hardly reach the detector. Therefore, those skilled in the art would not combine the teachings of Lee with Hejazi and Bueno. To the extent the Examiner contends that the phosphor layer of Bueno is equivalent to that of the claimed invention, this does not negate the fact that the combination would not provide the invention as the Examiner contends.

Therefore, Applicant submits that the lack of the attenuation response, as indicated in the prior submitted Appendix 1, remain appropriate.² Applicant notes that the above explanation goes beyond explaining the faults of each reference individually, but rather notes that

² A copy of Appendix I submitted on March 24, 2003 for parent application 09/385,443 is enclosed for the convenience of the Examiner.

collectively, the references still do not teach or suggest each feature of the claims. The Examiner cannot ignore the characteristics of the references that are unfavorable and only selectively rely on characteristics to assist in the rejection.

To the extent that the Examiner contends that means plus function should apply to the attenuation element, the Examiner cannot choose to ignore the functional limitation of the level of attenuation. If the Examiner continues to rely on such an analysis, it is manifest that the function be performed identically. Any analysis of equivalent structure is irrelevant without first finding that the art of record performs the function as identically claimed. Therefore, even by the Examiner's own construction of the claim, the rejection is facially deficient.

For the above reasons, claim 2 and its dependent claims should be deemed patentable. Since claims 6 and 8 describe similar elements, claims 6 and 8 and their dependent claims should be deemed patentable.

Response to Submissions

In the response to submissions section of the Office Action, the Examiner states that the amendment filed August 6, 2003 is improper but moot. Applicant respectfully requests that the Examiner clarify this matter as only being limited to the claim to priority, which also appropriately appears in the Preliminary Amendment.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. APPLN. NO.: 10/634,777

ATTORNEY DOCKET NO. Q76144

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

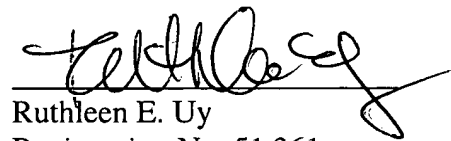
Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER


Ruthleen E. Uy
Registration No. 51,361

Date: April 14, 2004